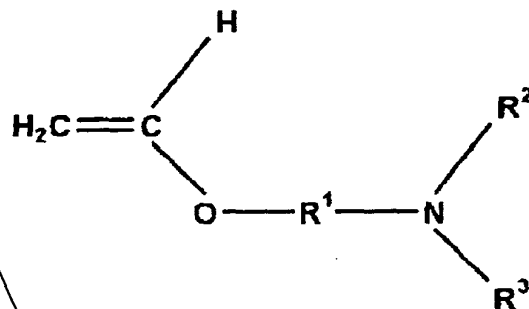


What is claimed is:

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1. An antimicrobial copolymer, obtainable by copolymerizing a vinyl ether of the general formula



where R^1 is a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms, and
 R^2 and R^3 are H or a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms, where R^2 and R^3 may be identical or different,

with at least one aliphatically unsaturated monomer.

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2. An antimicrobial polymer as claimed in claim 1, wherein the vinyl ether used comprises 3-aminopropyl vinyl ether.

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3. An antimicrobial polymer as claimed in claim 1 or 2, wherein the aliphatically unsaturated monomers are methacrylic acid compounds.

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4. An antimicrobial polymer as claimed in claim 1 or 2, wherein the aliphatically unsaturated monomers are acrylic acid compounds.

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5. An antimicrobial polymer as claimed in claim 1 or 2, wherein

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the aliphatically unsaturated monomers used are methyl methacrylate, ethyl methacrylate, butyl methacrylate, tert-butyl methacrylate, methyl acrylate, ethyl acrylate, butyl acrylate, tert-butyl acrylate, tert-butylaminoethyl esters, 2-diethylaminoethyl methacrylate, 2-diethylaminoethyl vinyl ether, N-3-dimethylamino-propylmethacrylamide, 3-methacryloylaminopropyl-trimethylammonium chloride, 2-methacryloyloxyethyltrimethylammonium chloride or 2-methacryloyloxyethyltrimethylammonium methosulfate.

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6. An antimicrobial polymer as claimed in any one of claims 1 to 5, wherein the copolymerization is carried out on a substrate.

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7. An antimicrobial polymer as claimed in any one of claims 1 to 5, wherein the copolymerization is carried out as a graft polymerization of a substrate.

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8. An antimicrobial polymer as claimed in claim 7, wherein the substrate is activated prior to the graft polymerization by UV radiation, plasma treatment, corona treatment, flame treatment, ozonization, electrical discharge or γ -radiation.

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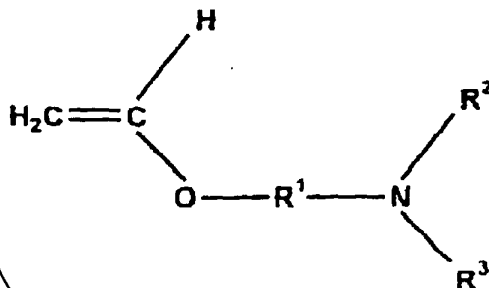
9. An antimicrobial polymer as claimed in claim 7, wherein the substrate is activated, prior to the graft polymerization, by UV radiation with a photoinitiator.

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10. A process for preparing antimicrobial copolymers, which comprises copolymerizing a vinyl ether of the general formula

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A_{cont}



where R^1 is a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms, and
 R^2 and R^3 are H or a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms, where R^2 and R^3 may be identical or different,

with at least one aliphatically unsaturated monomer.

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11. The process as claimed in claim 10, wherein the vinyl ether used comprises 3-aminopropyl vinyl ether.

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12. The process as claimed in claim 10 or 11, wherein the aliphatically unsaturated monomers are methacrylic acid compounds.

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13. The process as claimed in claim 10 or 11, wherein the aliphatically unsaturated monomers are acrylic acid compounds.

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14. The process as claimed in claim 10 or 11, wherein the aliphatically unsaturated monomers used are methyl methacrylate, ethyl methacrylate, butyl methacrylate, tert-butyl methacrylate, methyl acrylate, ethyl acrylate, butyl acrylate, tert-butyl acrylate, tert-butylaminoethyl esters, 2-diethylaminoethyl methacrylate, 2-diethylaminoethyl vinyl ether, N-3-dimethylaminopropyl-methacrylamide, 3-methacryloylaminopropyltri-methylammonium chloride, 2-

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methacryloyloxyethyltrimethylammonium chloride or 2-methacryloyloxyethyltrimethylammonium methosulfate.

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15. The process as claimed in any one of claims 10 to 14, wherein the copolymerization is carried out on a substrate.
16. The process as claimed in any one of claims 10 to 14, wherein the copolymerization is carried out as a graft polymerization of a substrate.
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17. The process as claimed in claim 16, wherein the substrate is activated prior to the graft polymerization by UV radiation, plasma treatment, corona treatment, flame treatment, ozonization, electrical discharge or γ -radiation.
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18. The process as claimed in claim 16, wherein the substrate is activated prior to the graft polymerization by UV radiation with a photoinitiator.

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19. The use of the antimicrobial polymers as claimed in any of claims 1 to 9 for producing products with an antimicrobial coating of the polymer.
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20. The use of the antimicrobial polymers as claimed in any one of claims 1 to 9 for producing medical items with an antimicrobial coating of the polymer.
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21. The use of the antimicrobial polymers as claimed in any one of claims 1 to 9 for producing hygiene items with an antimicrobial coating of the polymer.
22. The use of the antimicrobial polymers as claimed in any one of claims 1 to 9 in surface coatings, protective paints or other coatings.